Biodiversity Planning Support Programme

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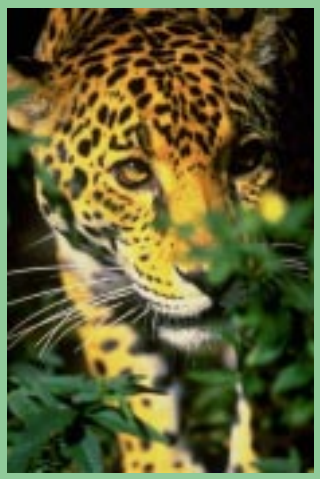

Guide to Best Practices for Sectoral Integration:

INTEGRATION OF BIODIVERSITY INTO NATIONAL FORESTRY PLANNING

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The Biodiversity Planning Support Programme

The **UNDP/UNEP/GEF Biodiversity Planning Support Programme**[1] (BPSP) had a mandate to provide assistance to national biodiversity planners as they develop and implement their national biodiversity strategies and action plans, or equivalent plans, programmes and policies. The integration of biodiversity into other sectors of the national economy and civil society has been identified as a critical indicator of successful implementation of sustainable development practices and of the objectives of the Convention on Biological Diversity (CBD). Article 6(b) of the CBD states:

Each Contracting Party shall, in accordance with its particular conditions and capabilities:
(b) Integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies.

Exactly how this integration is to be achieved has not been described clearly by the Convention, subsequent Decisions of the Conference of Parties (COP), or by other specialist bodies. The BPSP was therefore established to respond to needs recognized by the Parties to the CBD for strengthening national capacity to prepare and implement National Biodiversity Strategies and Action Plans (NBSAP) in compliance with Article 6 of the Convention.

The present document is one of eight thematic studies designed to provide guidance to biodiversity planners to mainstream biodiversity into sectoral and economic policy development and planning.

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1. Introduction

1.1 Forest Biological Diversity and the Convention on Biological Diversity (CBD)

Forest biological diversity[2] is one of the five main thematic programmes of the CBD. The agenda on forest biodiversity is organised around four main Confernece of Parties (COP) decisions:

In its **decision II/9,**[3] COP 2 adopted a statement from the Convention to the Intergovernmental Panel on Forests, on biological diversity and forests [decision II/9 paragraph 1, annex]. COP 2 also requested the Executive Secretary to produce a background document on the links between forests and biological diversity, in order to consider, at COP 3 whether further input into the IPF process was required [decision II/9 paragraph 2(b)]. The COP also requested the Executive Secretary to provide advice and information on the relationship between indigenous and local communities and forests as invited by the Inter-Agency Task Force of the International Panel on Forests [decision II/9 paragraph 2(a)].

COP 3 with its decision III/12[4] endorsed recommendation II/8 of Subsidiary Body on Science, Technology and Technical Advice (SBSTTA) regarding further input to the IPF [decision III/12, paragraph 2, annex] and also requested the Secretariat to develop a focused work programme for forest biological diversity [decision III/12, paragraph 6]. COP 3 requested SBSTTA to advise on the draft work programme and report back to COP 4 [decision III/12, paragraph 9]. It also directed SBSTTA to advance its scientific, technical and technological consideration of forest biological diversity by initially focusing on development of criteria and indicators for the conservation of biological diversity and analysing the ways in which human activities, in particular forest-management practices, influence biological diversity and assessment of ways to minimize or mitigate negative influences [decision III/12, paragraph 10].

The first three-year phase work programme for forest biological diversity was endorsed by COP 4 in its **decision IV/7** [5] which urged Parties, countries, international and regional organizations, major groups and other relevant bodies to collaborate in carrying out the task identified in the work programme [decision IV/7, paragraph 2].

In the **decision V/4,** [6] COP 5 decided that at its sixth meeting (COP 6) it would consider expanding the focus of the programme from research to practical action (Box 1) and called on Parties to take a number of practical steps to address the conservation and sustainable use of forest biological diversity [decision V/4, paragraphs 1, 2, 3, 7, 8, 9, 10, 13]. COP 5 asked SBSTTA for advice on a number of relevant matters, including the impacts of climate change, human-induced uncontrolled forest fires and harvesting of non-timber forest products on forest biological diversity [decision V/4, paragraphs 11, 12, 14].

The present document is designed to provide guidance to biodiversity planners in order for them to be able to fully comprehend the set of issues to be addressed for this much sought-after integration of biodiversity into forestry planning. It is the result of an analysis of commissioned country case studies (Cameroon, Costa Rica, Democratic Republic of Congo, Gabon, India, Indonesia, Mali, South Africa, Zimbabwe); of the information available on the Internet; and of the thorough discussions during the thematic workshop held in CIFOR's Headquarters (Bogor, Indonesia) in August 2001.

1.2 Introduction to this Guide

The central question for this guide is simple: "How to better integrate biodiversity issues into forestry sector planning processes?" Unfortunately, the answer is not so easily stated.

There is no 'silver bullet', no 'one-solution-fits-all'. Every case is special; a perusal of the country case studies will reveal just how unique the problems are - and solutions will vary. For biodiversity issues to be fully integrated into national

Box 1. The CBD's work programme on forest biological diversity

COP 4 endorsed the first three-year phase of the work programme on forest biological diversity [decision IV 7]. The elements of this first three-year phase:

1. Holistic and inter-sectoral ecosystem approaches that integrate the conservation and sustainable use of biological diversity, taking account of social and cultural and economic considerations;
2. Comprehensive analysis of the ways in which human activities, in particular forest-management practices, influence biological diversity and assessment of ways to minimize or mitigate negative influences;
3. Methodologies necessary to advance the elaboration and implementation of criteria and indicators for forest biological diversity; and
4. Further research and technological priorities identified in the recommendation II/8 of SBSTTA as well as issues identified in the review and planning process under the work programme.

COP 5 decided to consider expanding the focus of the work programme from research to practical actions at COP 6 [decision V/4]. To assist in addressing the various issues, COP 5 established an *ad hoc* technical expert group on forest biological diversity to provide advice on scientific programmes and international cooperation in research and development, to carry out a review of available information on status, trends and threats to forest biological diversity and to identify options and suggest priority actions for the conservation and sustainable use of forest biological diversity [decision V/4].

As result of the work of the *ad hoc* technical expert group on forest biological diversity, the Executive Secretariat has produced a **Draft Revised Programme of Work on Forest Biological Diversity** [7] discussed at SBSTTA 7. This new draft work programme consists of five operational objectives and fifteen activities at global, regional and national levels. Activities are grouped in three main elements: (i) Assessment and monitoring of forest biological diversity, (ii) Targeted actions addressing direct causes of forest biological diversity loss, and (iii) Enabling activities addressing the underlying causes of forest biological diversity loss. The lengthy discussions during SBSTTA 7 have been translated in a specific recommendation to COP 6 to, among others, adopt the elements of the new expanded work programme.

From the Forest Biological Diversity page of the CBD website[7]

forestry plans or programmes, one will require a whole set of political, social and institutional conditions from outside of the formal planning process.

Although much has been written about how to achieve conservation and sustainable use of forest biodiversity, there are formidable barriers between theory and practice. National level experience with the integration of biodiversity into the forestry sector via National Biodiversity Strategy and Action Plans (NBSAP), National Forestry Action Plans (NFAP) or National Forestry Programmes (NFP) has been mixed, both in terms of extent and effectiveness (Box 2). But, it is also clear that there are many lessons to be learnt from the experiences of countries - lessons from both successes and failures. There may be some general principles beyond the blindingly obvious, which can serve as guidelines along this difficult pathway.

1.3 Structure of the Guide

Participants of the thematic workshop mentioned in section 1.1 above, identified several broad issues that need to be considered if biodiversity integration is to happen, including review of policies, laws and regulations, institutions, planning and implementation. Each of these will be covered in the following sections:

2. Good Policies
3. Laws and Regulations
4. Strengthening Institutions
5. Forest Biodiversity Knowledge
6. Planning Process

1.4 Layout of the guide

Within this guide, best practice guidance or principles are presented as bullet points, thus:

- **Ensure an adequate negotiating process representing all stakeholders**

We have tried wherever possible to complement the guidance by referring to real life examples from case studies or from the literature, and by providing methodologies or tools when they were available. Key points mentioned in the text and relevant case studies are drawn out and summarised in side boxes, framed as with the box on this page (Box 2). We also ensured that all the references are available on the Internet (or on request from UNEP or CIFOR), as many biodiversity planners have little access to well-stocked libraries or scientific journals; the web addresses are given in the endnotes.

Box 2. The Tropical Forestry Action Plan

Critique and Review
In 1990, concern over the problems associated with the TFAP began to coalesce. Several NGOs published critiques of the Plan. The World Resources Institute released its report **Taking Stock: The Tropical Forestry Action Plan After Five Years,**[8] in June 1990 concluding that while the TFAP has had some positive results, serious problems remain: "The most important conclusion of this assessment is that, despite some successes, the TFAP as currently implemented is not achieving many of the plan's original objectives."

As a result of the widespread criticism of the TFAP, the FAO authorized an independent review of the initiative. The review team, headed by Ambassador Ola Ullsten, ex-Prime Minister of Sweden, also identified a number of areas where the TFAP had fallen short of its goals in May 1990. It found that *most national plans simply justify increased investment in the forestry sector* — a focus too narrow to adequately address the root causes of deforestation much less to affect them significantly.

Successes
Though criticism of the TFAP has been widespread, the Plan also has its positive aspects. The *TFAP has offered a framework to bring rich nations together with developing countries to address the threat of tropical deforestation*. It has provided a basis for determining investment priorities and funding requirements to lay the foundations for longer-term solutions. And it has offered an opportunity to improve aid coordination and to stimulate institutional reforms and new initiatives for a concerted global effort. Furthermore, the TFAP process has been successful in prompting a re-examination of forest policy in several countries and in increasing awareness of forest issues both in developing and developed countries. In many countries, the TFAP has generated national-level attention to forest issues and has often brought them to the attention of decision makers at high levels.

*From: J. Lyke & S. Fletcher 1992. (**Deforestation: An Overview of Global Programs and Agreements** [9])*

2. Good Policies

First and foremost, the conservation and sustainable use of forest biodiversity must be considered as a national priority for it to act as a central paradigm for all subsequent policies and plans. Ideally, biodiversity policy should not be seen as independent of forestry policy, but rather forest policy (and other sectoral policies) should be seen as an instrument to implement national biodiversity goals. These goals differ from one country to another. In Mali, for example, integration of biodiversity in the forest sector planning is acknowledged as one of the most important tools for combating biodiversity loss, desertification and poverty. Due to the difficult socio-political context, the first priority in the Democratic Republic of Congo (DRC) is to reach stability as reliability of forest planning and biodiversity integration depend on having "working" institutions. Cameroon shifted emphasis from trees to the entire forest ecosystem and tried to harmonise various users' needs (they were sometimes conflicting). It also tried to make its policy coherent and complementary to national development plans of other sectors.

An enabling policy environment is a key to successful biodiversity conservation, and planners should play a central role in helping governments to formulate and implement new enabling policies. This section of the report is largely inspired by the work of the Interntional Institute of Environment and Development (IIED)on **'Policies that work for forests and people'**[10] and a visit to their site is highly recommended.

2.1 What is a "good policy"?

In the last decade, biodiversity and forestry policies have become more numerous and complicated. As a result, they are in danger of becoming barriers to the implementation of good, biodiversity-friendly forestry management practices by stakeholders. There is a gap between policies and the often over-structured and under-resourced institutions charged with implementing them. 'Policy inflation, capacity collapse' syndromes are paralysing the world of forest management. They need to be replaced with simple, agreed policies with vision, and with strong capacities to interpret and implement them. This requires engagement with the various actors demanding specific forest goods and services, and with those in a position to produce them - not just engagement amongst authorities and elites. Such an approach highlights the importance of a forest policy decentralisation involving all stakeholders (e.g. Bolivia or Mali; see also CIFOR's publication on **Decentralisation and forests in Indonesia** [11]). Various tools are available at the OECD website[12].

A good forest, or biodiversity policy should:

- Be clearly stated and easily accessible
- Provide shared vision, but avoid over-complexity
- Clarify how to integrate or choose between different and often conflicting objectives
- Help determine how costs and benefits should be shared between groups, levels (local to global) and generations
- Provide signals to all those involved on how they will be held accountable
- Define how to deal with change and risk, when information is incomplete and resources are limited
- Increase the capacity to implement decisions effectively
- Produce forests that people want, and for which they are prepared to manage and pay

Ideally, one should retrieve such concerns in NBSAP country reports submitted to the CBD [13]. Unfortunately this is rarely the case.

2.2 Principles for developing processes for good "integration" policies

- **Recognise multiple perspectives**

There are multiple valid perspectives with regard to biodiversity and forestry issues. They should be acknowledged. A lot of the issues regarding biodiversity conservation or sustainable use are based on values. These values differ from one stakeholder group to another; what satisfies one may be abhorrent to another. They are not necessarily 'true', 'rational' or based on in-depth scientific understanding but reflect a specific degree of commitment by the parts of the society who subscribe to these values. Different value systems will produce different priorities (see **Visions of alternative (unpredictable) futures and their use in policy analysis**[14] by R. Costanza).

- **Ensure an adequate negotiating process representing all stakeholders**

Each group of actors needs the opportunity to present their priorities. Because of the huge power imbalance between various stakeholder groups (e.g. local people vs. large industrial conglomerates) special attention should be paid to allow the 'weakest" players in the game to voice their own priorities (see for example the work by **CIFOR's Adaptive Collaborative Management Programme**[15]). The various processes that help identify and build shared vision or consensus on key goals or priorities can be effective as long as one does not underestimate the time, and the human and financial resources needed to develop and make such a shared vision a reality.

A practical example is given by the Forest Stewardship Council's (FSC) certification scheme, which attempts to reduce the imbalance between the different stakeholders (see **National Certification Group**[16]). Stakeholder involvement in the implementation process should be a *sine qua non* of forest management. Some field examples are also given on-line. FAO also gives an overview on **Criteria and Indicators for sustainable forest management**[17] and one should look at the **C&I elaboration tool**[18] developed by CIFOR.

- **Agree to disagree**

Develop policies that involve various interest groups with completely different levels of power or resources - groups, essentially, with a long history of disagreement and distrust. In these conditions, pushing for a consensus and simple generic solutions is likely to be ineffective and, worse, can lead to ultra-conservatism or refusal to progress. This creates 'wick-ed' problems: interrelated sets of complex, intertwined issues that cannot be solved in isolation from one another, but also hinge on differing socio-political values that clash in the political arena. Wicked problems typify most biodiversity and forestry related issues. There are no simple solutions to wicked problems (see B. Schindler & L. Cramer argument on **wicked problems**[19]). Nevertheless, even if stakeholders disagree on some goals and objectives, there will always be some areas of consensus that can provide a basis for more integrated planning. One way to reach this consensus is the **social learning in community forests**[20]. Mali is a good example of how the state involved all stakeholders in the biodiversity and forest planning decision process. Such involvement is pretty well described for the ACP countries in **Better addressing conflicts in natural resource use through the promotion of participatory management from community to policy level**[21]**.**

- **Learn from the past and from experience**

Development of biodiversity or forestry management and policies should be treated as experiments from which we must learn. Adequate policy development processes will allow involved stakeholders to learn from others, solve problems and evaluate information for themselves. Processes should be adaptive allowing for monitoring, stakeholder feedback and incorporation of up to date information. This adaptive approach is one of five points that serve as the basis for the operational guidance for application of the **ecosystem approach**[22] in the Convention on Biological Diversity. **Forest, Biological Diversity and the maintenance of the natural heritage**[23] by FAO is also a useful reference.

Box 3. A success story: Forest Policy Development in Grenada

An early Forest Policy review (1984), prepared by external consultants and a few senior Forestry Officials, led the Department to work only in Reserves, and to take little account of people's legitimate needs from forests. Until recently, people were obliged to be part of the problem, since they were excluded from possible solutions. The lack of success meant that the thinking of the Forest Department started to change.

The period of Forest Policy development, from 1997-99, was an exciting time for Forest Department staff and other stakeholders. The Forest Policy Process Development Committee made every effort to ensure that, as many people were involved as possible. We found that the involvement of all interest groups and the public in general in the development process created a strong sense of ownership of the policy. This use of consensus during Forest Policy development has been a major reason for the strong political support that the Policy has received from the government.

The resulting policy presents the Forest Department with a major new mandate. Instead of continuing very small-scale forestry and sawmilling operations unlinked to demand, it will now facilitate a variety of stakeholders in understanding, realising and sustaining the true values of Grenada's forests. The participatory process revealed that the major benefits were environmental services: water supplies for domestic use and the rapidly developing tourism industry; landscape and biodiversity as a basis for both local recreation and tourism; and agricultural support systems (soil and water conservation, collection and hunting of non-timber forest products, and potentials for agroforestry). This illustrates an important shift from a classical sectoral thinking towards a more global ecosystem management thinking, integrating (among others) biodiversity concerns into the forestry sector.

Even prior to full implementation, Grenada's new forest policy is already having broader impacts. Senior officials and politicians consider it to have opened up models for participatory policy- making in general, and there are already plans for similar approaches in the areas of agriculture and land use.

From: Policy that Works for Forests and People Series No: 10.
Participation in the Caribbean: A review of Grenada's forest policy process [24]

3.0 Laws and Regulations

Having good policies is necessary, but not sufficient, for effective integration of biodiversity and forestry. One also needs a legislative and regulatory framework conducive to the effective implementation of policies (see **New trends in forestry public administration**[25]). What are the attributes of such a framework? To try answering this question we will consider first the designing of the law, then consider the contents. Although another part of this report is about implementation, we will consider law enforcement issues in this section.

3.1 Principles for designing appropriate laws and regulations

- **Laws and regulations should adequately reflect policies**

This may appear obvious but experience has shown that this principle is often overlooked (e.g. see **Formulation, analysis and implementation of forestry policies**[26]; Legal, policy and institutional framework for **Humid tropical forest** and **Dry tropical forest**[27]). In South Africa (I. Grundy personal communication), the transfer from policy to laws was initially a filtering process and as a result the drafted laws did not adequately reflect the original policy. This was finally avoided by embarking on a lengthy stakeholder consultation process. It should be noted that this is always a potential risk when moving from a policy to a law. In the case of Mali, the problem is different: laws and regulations were drafted in a political vacuum without a real biodiversity or forestry policy in place.

- **Laws should be relevant, simple, clear and targeted to a problem or a set of problems**

Laws that are too complex and difficult to understand, require complicated and expensive procedures or abrupt reorientation of institutional or social behaviour, run the risk of becoming unenforceable, irrelevant, and create opportunities for corruption and other illegal activities. As a result, though probably designed with laudable intention, they will become barriers to implementation of good forestry practices.

- **Participatory approaches should be favoured in designing laws and regulations**

Participation is important at the policy level but also at the legislative level. Fortunately, in the wake of the apparition of new democratic conditions in several countries, civil society has been able to play an

Box 4. Revisiting the forestry laws in Mali

Starting in 1992, the Government of Mali initiated a thorough review of the forestry laws and regulations. This reviewing process was carried out through a large popular debate, from the village to the national levels. A national forum including representatives of all the various socio-professional groups validated the conclusions of the previous consultations. The current laws regarding the management of forest, wildlife and halieutic resources are the direct result of this broad national consultation process.

Translated from: ***Evolution des Politiques et Législations Forestières au Mali***[28]*, Yafong Berthé (n.d.).*

increasingly important role in the legislative processes related to forests and biodiversity. Several of the country case studies (Mali, South Africa, Costa Rica) reveal an active participatory approach to design legal or regulatory frameworks. Several useful Internet references relating to participatory approaches can also be found in the annotated bibliography available at the Biodiversity Planning Support Program website[1].

- **Biodiversity and forestry legal frameworks should recognise and acknowledge other existing regulations or regulators on forest management outside of the forest sector.**

Two areas are of practical importance here: traditional rules and extra-sectoral issues. Several examples of the relevance of 'traditional forestry-related knowledge' exist in the literature together with numerous examples of how detrimental it could be to ignore or marginalize this traditional knowledge (**Forest dwellers, indigenous people, women and local communities**[29]). A great deal of information on traditional knowledge is available on the CBD website in relation with **Article 8j**[30] of the Convention. There is also a large available literature on community-based forest management. The following web-documents (**bibliography on joint forest management**[31] and **bibliography on community forestry**[32] contain numerous useful references and links. A number of useful links on indigenous knowledge in forestry are available in the **Ethnoforestry**[33] databank.

The influence of other sectors (agriculture, transportation, oil, etc.) on the fate of forests and forest biodiversity has been an important research theme, often under the generic appellation 'underlying causes of deforestation' during the last few years. All these studies show clearly that any tentative efforts to address deforestation issues without considering sectors outside of the forestry realm are doomed. The final report of the project on **'Addressing the Underlying Causes of Deforestation and Forest Degradation'**[34] contains several useful case studies, analyses and policy recommendations. **Can Tropical Forestry be Made Profitable by 'Internalising the Externalities'?**[35] by Richards and Costa presents some useful considerations on extra-sectoral influences and incentives for sustainable forest management.

Box 5. Underlying causes of deforestation, the CBD's perspective

The underlying causes of forest decline are the forces that determine, through complex causation chains, the actions of the primary actors. They originate in some of the most basic social, economic, political, cultural and historical features of society. They can be local, national, regional or global, transmitting their effects through economic or political actions, such as trade or incentive measures. They are both numerous and interdependent and the approaches to deal with them are country-specific and will therefore vary among countries. In analysing the increasing literature available on the subject, in particular the recommendations and proposals for actions of the Intergovernmental Panel on Forests (IPF), the Intergovernmental Forum on Forests (IFF) and the work of the Centre for International Forestry Research (CIFOR), the following main underlying causes of forest decline were identified:

(a) Broader macroeconomic, political and social causes, such as population growth and density, globalisation, poverty, unsustainable production and consumption patterns, ill-defined and implemented structural adjustment programmes, political unrest and wars;

(b) Institutional and social weaknesses, such as lack of good governance, lack of secure land tenure and uneven distribution of ownership, loss of cultural identity and spiritual value, lack of institutional, technical, and scientific capacity, lack of information, of scientific knowledge and the use of local knowledge, in particular lack of awareness of the value of forest biological diversity for provision of goods and services;

(c) Market and economic policy failures, such as under-valuation of forest biological diversity goods and services; perverse incentives; and subsidies;

(d) Other policy failures, such as ill-defined development programmes, ill-defined or unenforced regulatory mechanisms, lack of clear environmental policies and of environmental impact assessments.

From: Note by the Executive Secretary UNEP/CBD/SBSTTA/7/6
*(**Report of the Ad Hoc Technical Expert Group on Forest Biological Diversity**[36]*

Some additional points need to be highlighted:

- Although consultation and participation are essential, the time frame for the legislative process should be adapted to the targeted problems.
- There must be an appropriate review period for assessing the effectiveness of laws of regulations with some provisional mechanisms to change those if proved ineffective or detrimental.
- The right instrument should be chosen for the specific targeted problems (laws, regulations, by-laws, decrees, etc.).
- Competent and relevant bodies should be asked to draft laws. Environment or Forest departments or agencies are unlikely to be able to draft an adequate legislative system if working alone (see the part on **Institutions**[37] in this report).

Some of these points are usefully addressed in **Policies, institutions and means for achieving forest sustainable development.**[38]

3.2 Contents of an appropriate legal framework

The following list of issues / items to address in legislative and regulatory frameworks is not exhaustive but reflects important points that were identified during the thematic workshop.

- **Biodiversity issues must be integrated into any sectoral laws (such as infrastructures, transportation, mining, agriculture, etc. and of course forestry). So far this is generally not the case and one of the reasons of the set of thematic studies undertaken by BPSP.**

- **The requirements of International Treaties or Multilateral Environmental Agreements (such as the CBD, CITES, etc.) must be integrated into national laws and regulations otherwise they will never be enforced.**

- **Among the topics that should be addressed in or part of an appropriate legal framework related to forest and biodiversity issues, one can list:**

  - Regulation on the access-rights to forest resources based on traditional access conditions but also on professional qualification (controlled user groups and qualified user groups)
  - Regulation on tenure and ownership of land, forest land, forest products
  - Regulation on the use of incomes generated from sale of forest goods and services (national, local): who benefits? How does this contribute to forest management and biodiversity?

Box 6. Aboriginal people and forests in Canada

Recognition of the implications of the definition, recognition and exercise of Aboriginal and Treaty rights for forest management, and vice-versa has been slowly filtering through policy and practical decisions over the past five years. This awareness has developed at the international level, in the federal government, in provincial governments, within the forest industry and among individual Aboriginal communities and their neighbours. Much remains to be done to translate this into forest management regimes and practices. As issues of Aboriginal self-government, land claims, Aboriginal and Treaty rights in areas of traditional use and Treaty areas and the responsibilities for Aboriginal lands are resolved, they will contribute to increased communication and closer cooperation among governments, industry and Aboriginal peoples. Resolving these issues will take time. The Royal Commission on Aboriginal Peoples has, therefore, recommended that interim measures be taken to use natural resources for Aboriginal economic and cultural development. The commission also recommends expanding the range of benefits derived from resource development in areas of traditional use and Treaty areas, in order to achieve a more equitable distribution of economic benefits from such activities.

Principle:
Aboriginal peoples have an important and integral role in forest policy development, planning and management. Forest management in Canada, therefore, must recognize and make provision for Aboriginal and Treaty rights and responsibilities, and respect the values and traditions of Aboriginal peoples regarding the forests for their livelihood, community and cultural identity.

To address their legitimate needs and aspirations, Aboriginal communities require greater access to forest resources, and an increased capacity to benefit from forests in their areas of traditional use and Treaty areas, and to contribute to their management.

Honourable, fair and timely resolution of land claims, modern treaties and Aboriginal self-government is necessary in order to create a stable environment for sustainable forest management.

From: Canadian National Forest Strategy 1998-2003: Sustainable Forests. ***Chapter 7: Aboriginal peoples issues of relationship.***[39]

Box 7. Multilateral Environment Agreements and National Laws: Examples from Case Studies

Costa Rica:
Costa Rica is often considered relatively advanced in the sectoral integration of biodiversity but although the country has signed over 50 international and regional environmental treaties or agreements, legislation at the national level does not reflect the effective implementation of those treaties. In other words, all the commitments are accepted, but they are not easily accomplished or even clearly understood.

Gabon:
Because the Environmental Law was designed before the entry into force of the Convention on Biological Diversity, the requirements of the Convention are not adequately addressed in the law and so far there are no signs that the environmental legal framework will be revised soon.

Mauritania:
The environmental laws themselves do not directly contradict international obligations but often remain rather sectoral or unrelated in that they refer explicitly only – if at all – to those international instruments directly linked to the sector being regulated. None of the Articles [of the Forestry Law] make references to the function of forests as sinks for carbon dioxide (UNFCCC), as habitats of a huge variety of species (CBD) some of them potentially endangered (CITES) or as protection against desertification (CCD). The Environmental Framework Law, the most recent act, nevertheless, mentions amongst others biodiversity and combating desertification as its objectives, potentially representing a shift towards a more integrative approach.
*From: **Finding Synergies between Forest-Related MEA - Case Study on Mauritania**[40]*

Hungary:
The Nature Protection Act and the Act on Hunting were developed and adopted together with the Forest Act. That is one of the reasons the three acts are in harmony with each other. The Nature Protection Act is strongly influenced by the Biodiversity Convention. The Act aims to regulate the general conservation of natural values and areas, their natural systems and biodiversity, as well as promoting their scientific cognition and sustainable use. It also seeks to protect, conserve, maintain and enhance Hungary's natural values and areas.

*From: **Finding Synergies between Forest-Related MEA - Case Study on Hungary**[41]*

- Regulation on the export of forest products for commercial purposes and other international trade issues
- Regulation of commercial use, harvesting intensity even for locally used products

Reform of fiscal policies in the context of national forest programmes in Africa[42] offers interesting references and case studies on the designing and implementation of economic regulations with a focus on Africa.

3.3 Law enforcement (or lack of it)

In 1990, Australian Judge Thomas Barnett appointed in 1987 by Papua New Guinea Prime Minister Paias Wingti to lead a 'Commission of Inquiry into Aspects of the Timber Industry in Papua New Guinea', concluded:

'It would be fair to say, of some of the companies, that they are now roaming the countryside with the reassurance of robber barons; bribing politicians and leaders, creating social disharmony and ignoring laws in order to gain access to, rip out, and export the last remnants of the province's valuable timber.

These companies are fooling the landowners and making use of corrupt, gullible and unthinking politicians… It is doubly outrageous that these foreign companies … have then transferred offshore secret and illegal funds… at the expense of the landowners and the government. There can be no doubt that the timber industry, by its very nature, is conducive to acts of a criminal nature contrary to law and proper government ministration'.

This summarises a general consensus that having good laws and regulations is a necessary but not sufficient condition for good forest management or for biodiversity conservation. A thorough discussion on this topic can be found in A. Contreras' paper on **'Forest Law Compliance: An Overview'**[43]. This synthesis as well as other useful documents and links to websites related to law enforcement issues can be found in the World Bank's **Forest Law Enforcement and Governance**[44] webpage.

Among the reasons generally identified for the lack of forest law compliance are:

- Lack of real political will (Biodiversity or forest issues are low national/local priorities)
- A matter of survival: local people are left with no other choice but to break the law to obtain vital goods: food, fodder, fuelwood, etc. (see South Africa for an example of people forced to unsustainably use forest and woodland products for survival).
- There is an overall lack of capacity - training, financial and human resources - of the forestry or environment departments (the forestry department in Gabon is in charge of over 20 million ha of forest with less than 300 persons, 80% of them being based in the capital city; in South Africa there is a set of good policies and laws in place but very often a lack of capacity to implement them).
- Existing laws may be inappropriate: too complex, unrealistic, irrelevant, perverse, etc. or simply lacking implementing texts leaving ample ground for discretionary interpretations (Results of lacking implementing texts can be seen in Gabon both for environment and forestry laws. In South Africa, some parts of the new forestry act are not practical. They therefore are not implemented).
- Actual broad discretionary powers combined with generally humble salaries in forestry services increase the chances of corruption or other malfeasance.
- There are numerous conflicting interests at stake (with other sectors such as mining, housing, etc.; short term profits vs. long term benefits, etc.)
- In most cases forest operations involve large areas in remote places difficult to monitor; land tenure is unclear or often land has been unilaterally appropriated by the State; baseline data are lacking or outdated, etc.
- Penalties are so light that they do not translate into a significant deterrent.
- Often two competing systems are working simultaneously: the formal and informal sector. The latter is in most cases largely overlooked though it has an important impact on forest biodiversity (though in **non-observed economy measurement**[45], OECD is proposing some solutions to take into account the informal sector).

The list could go on. The important issue is "What can we do to reverse these problems? Contreras proposes some strategic principles:

- **Identify core functions of government and share other functions with the private sector and the civil society.**
- **Streamline the forestry policy, legislative and regulatory framework.**
- **Establish clear property rights; carry out delimitation and demarcation of forestlands.**
- **Involve the media, NGOs, local communities and the public in combating forest crime.**
- **Integrate interactions with other sectors in the design of forest policies.**
- **Strive to keep a balance between industrial demands and the level of sustainable harvest.**
- **When appropriate, increase the use of market mechanisms.**
- **Consider the potential to violate the future law.**

Some solutions for the prevention, detection and suppression of illegal practices in forestry are:

- **To prevent illegal activities:**

- Create incentives for self-enforcement (e.g. direct payments, performance or mitigation bonds).
- Reduce discretionary power.
- Increase transparency and accountability in decisions.
- Promote public education and awareness.
- Consider privatisation of some responsibilities.
- Provide for increased administrative checks and balances.
- De-politicise the Public Forest Administration.
- Increase salaries of the Public Forest Administration staff.
- Require forest management plans for all operations involving forest interventions.
- Promote voluntary, private certification.
- Foster voluntary adoption by private industry of standards of environmentally and socially acceptable forest management practices and codes of conduct.
- Foster the development of buyers groups.
- Provide easy mechanisms for 'whistle blowers'.
- Increase capacity for proper training and equipment, adequate human and financial resources (e.g. in Costa Rica, resource allocation necessary to enforce the law is mentioned in text of the law).

- **To detect illegal activities:**

- Generate baseline information.
- Engage NGOs and environmental groups concerned with law enforcement.
- Establish monitoring systems.
- Expand the use of surprise controls, certification and various methods of verifying consistency of information.
- Facilitate independent reporting.

- **To suppress illegal activities:**

- Ensure that an appropriate justice system is in place: efficient, not corrupt with transnational legal empowerment.
- Engage law enforcement agencies and the army.
- Increase the penalties committing illegal acts.
- Enlist the help from international organizations.

Box 8. A promising example: The Kenya Forests Working Group (KFWG)

The KFWG is a consortium of institutions and organizations (government and non-government, local, national and international) concerned with forests, their management and conservation. Established in 1995, KFWG is a sub-committee of the East African Wild Life Society. The objectives of the group are:

1. To raise awareness and concern for sound forest management in Kenya.
2. To develop and implement a mechanism to detect unsound forest management and conservation practices in the country.
3. To develop functional alliances of concerned groups and/or organizations to inform and influence decision-making and policies.
4. To strengthen community-based action groups.
5. To document forest management and conservation experiences

Among other various activities, KFWG carries out assessments of forests in Kenya. These assessments are carried out in response to reports and issues arising from the monthly meetings and from the Forest Hotline (+254 02 571335). The main aim of the assessments is to establish validity of reports coming to the secretariat. The gathered information is then used for advocacy campaigns. KFWG also monitors alterations of forest boundaries by analysis of Kenya Gazette contents that relate to forest management and conservation.

So far, the KFWG has:

- Successfully facilitated the initiation and mobilisation of Nairobi residents to protest against illegal allocation of Karura forest in 1998. Forest clearing for development of housing estates came to a stop.
- Successfully served as a link between forest stakeholders and those in the government charged with forest management and conservation. For example, meetings between the Permanent Secretary Ministry of Natural Resources and Karen Langata District Association were facilitated by KFWG in order for the latter to air their concern over the destruction of Oloolua Forest resulting from excavation for building stone. The government in October 1999 banned stone mining in Oloolua Forest. A meeting with Coast Province Provincial Commissioner led to the halting of the proposed clearing of 5,000 hectares in Arabuko-Sokoke Forest in 1997. Meetings facilitated by KFWG between the Permanent Secretary - Ministry of Natural Resources, Permanent Secretary – Ministry of Lands and Ngong Road Forest Sanctuary Trust led to the issuing of a title deed for the Ngong Road Forest Sanctuary in 1999.
- Carried out an assessment of the destruction of Eburu and Bahati forests in Rift Valley. This was done in February 2000 in response to persistent complaints from the public on the continued destruction of the forests. After presentation of the report to the Forestry Department, major changes were effected on the ground. For example, a forester and three forest guards were posted to affected areas in Eburu, the Forestry Department and the KFWG organised a stakeholders workshop at Eburu on 9th June 2000 whose major outcome was the formation of a conservation and management committee for Eburu. One of the mandates of the committee is the drawing and implementation of an action plan.
- Managed to reverse a decision by the Kenya Railways Corporation to be supplied with timber sleepers made of locally harvested indigenous tree species.

From the KFWG webpage[46]

4. Strengthening Institutions

What makes institutions "adequate" and fit for the job?

An administrative framework must be established that is capable of implementing and managing biodiversity policy. It should ideally be designed so that:

- **Institutional organization must reflect biodiversity as a national priority**
- **Institutional organization should reflect the scope of integration at the national and sub-national levels**
- **A mechanism (possibly informal) must be created for effecting intra-governmental coordination in respect to biodiversity issues**

- **Institutions that bring together stakeholders in the forestry and biodiversity sectors must be created**

The responsibilities and the means for implementing forest and biodiversity obligations must be clearly assigned. This should ideally be at the level of the legal framework but might also be part of the planning exercise though in this case it is likely to lack the necessary strengths and might become toothless.

- **The ultimate planning authority for biodiversity conservation should rest within agencies with real power.**

Effective planning requires leadership by one or more agencies with real power to allocate resources and set national priorities. For this reason, agencies charged with managing protected areas, forestry, or wildlife may not be the most suitable political centre of biodiversity planning, even though they will certainly be important participants. Rather, ministries or departments of planning or finance should catalyse biodiversity planning, capitalizing on their proven ability to elicit cross-sectoral cooperation. Examples from Cameroon and Democratic Republic of Congo show clearly that having environment and forestry under the same department is not a sufficient condition to ensure adequate integration and implementation, though this is probably better than having a strong sectoral department (forestry, mining, etc.) and a separate, weak environmental one.

- **Institutions involved in biodiversity planning must honestly evaluate their strengths and weaknesses.**

There is a general lack of fit between institutions and their mandate or *modus operandi*. In many countries, forest departments or forest services are legally responsible for managing vast portions of the public forest estate, but do not actually plant or harvest trees. Similarly, many non-governmental organizations may have a deeply held commitment to fostering community empowerment or conserving habitats but lack the wherewithal needed to do the job properly. They must be prepared to shoulder some authority and responsibility where circumstances dictate and decide how to strengthen their roles in implementing biodiversity plans.

Useful ideas and references - based on Australia, New Zealand and United States case studies can be found in C. Binning's '**Conserving Biodiversity: Institutions, Policy and Incentives**'.[47]

5. Forest Biodiversity Knowledge

Clearly, having policies, laws and institutions are necessary conditions but if one does not know the status and trends of the forest biodiversity in a country or a region it is unlikely that integration will occur; one cannot take into account what is not known.

The various case studies illustrate the different levels of knowledge regarding forest biodiversity as well as the huge existing gaps. A quick look at the Parties reports to the CBD shows also the dire situation of developing countries in terms of assessment and knowledge of the status of all their forest wealth components. Compare an initiative like the **Nation's Biological Information System**[48] put in place in the USA and the level of information available in most developing country reports to the CBD to understand the issue.

At the international level, the **Convention on Biological Diversity**[49] promotes partnership among countries by the establishment of **Clearing House Mechanisms**[50]. Their provisions on scientific and technical cooperation, access to genetic resources, and the transfer of environmentally sound technologies form

Box 9. Institutions in charge of biodiversity issues in Costa Rica

Ministry of Environment and Energy (MINAE)
From an institutional perspective, the Ministry of Environment and Energy was created in 1982 by the law that reorganized the Executive Branch and the law's amendments in 1987, and particularly by the law that changed the Ministry of Industry, Energy and Mines into the Ministry of Natural Resources, Energy and Mines-MIRENEM (1990). In November 1995, the promulgation of the Environment Organic Law defined a more specific range of activities for MIRENEM regarding the field of natural resources, and its name became Ministry of Environment and Energy (Ministerio de Ambiente y Energía-MINAE).

The creation of MIRENEM and, later, of MINAE, was Costa Rica's response to a series of social demands to develop an institutional framework adequate to the protection of the country's natural resources. One of MINAE's main objectives is the consolidation of the National System of Conservation Areas (Sistema Nacional de Areas de Conservación-SINAC), aimed at developing an integrated institutional effort to carry out the Ministry's biodiversity-related activities throughout the country.

The National System of Conservation Areas (SINAC) is a decentralized and participatory institutional system that puts together the Ministry of Environment and Energy's responsibilities regarding protected wildlands, wildlife and forested areas, in order to plan and execute processes aimed at achieving the sustainable management of the country's natural resources.

Administratively, SINAC is a system comprised of a head office and several subsystems called Conservation Areas. Conservation areas are territorial units administered according to a similar management and development strategy, where private and government activities interrelate in fields such as the use and conservation of natural resources, while sustainable development alternatives are sought as part of a joint effort with the civil society.

From Costa Rica case study

the foundation of this partnership. But there is still a lack of information on forest biodiversity. The recent work done by the Ad Hoc Technical Expert Group on Forest Biological Diversity and CIFOR to prepare CBD SBSTTA 7 (**Report of the ad hoc technical expert group on forest biological diversity; Review of the status and trends of, and major threats to, the forest biological diversity, prepared by the Ad Hoc Technical Expert Group on Forest Biological Diversity; Impacts of human-induced fires on biodiversity and ecosystem functioning, and their causes in tropical, temperate and boreal forest biomes; Sustainable management of non-timber forest resources**)[51] brings together a large amount of the existing information but also serves to highlight the important deficiencies in knowledge. To fill these gaps, several international initiatives have been recently started or are planned for the near future:

- The **International Biodiversity Observation Year**[52] (IBOY), an initiative by DIVERSITAS, aims at addressing the questions: What biodiversity do we have and where it is? How is biodiversity changing? What goods and services does biodiversity provide? How can we conserve biodiversity?

- The **Global Taxonomy Initiative**[53] (GTI) has been established by the Conferences of Parties of the CBD to address the lack of taxonomic information and expertise available in many parts of the world with the specific intention of supporting the implementation of the work programmes of the Convention.

- The **Global Biodiversity Information Facility**[54] (GBIF) will be an interoperable network of biodiversity databases and information technology tools that will enable users to navigate and put to use the world's vast quantities of biodiversity information to produce national economic, environmental and social benefits.

- **Species 2000**[55] has the objective of enumerating all known species of plants animals, fungi and microbes on Earth and is an Associate Participant in GBIF

- The **Biodiversity Conservation Information System**[56] (BCIS) was founded on principles of partnership. BCIS brings together twelve international organisations and networks concerned with the conservation of biodiversity. The Members seek to pool data, information, and expertise, in order to better guide decision-making, to (1) assess the extent and nature of threats to species, habitats and landscapes; (2) assist nations, intergovernmental agencies, conservation organisations and the commercial sector to identify, prioritise and implement conservation objectives; and (3) build technical capacities at the national and local levels to enable equitable and representative inputs into issues of conservation concern.

Numerous species databases are available online though most are not specifically focusing on forests. Among the most important and most comprehensive data- or metadata- bases, one can list:

- For taxonomic databases, the best collection of links can be found in the website of the **International Working Group on Taxonomic Databases**[57] or at **The Internet Biodiversity Service**[58] which offers links to biodiversity information including databases, pictures, maps, etc. The Internet Directory for Botany[59] provides information and links to checklists, floras, databases and vegetation information. A set of very comprehensive lists of species including animals, plants and microbes is available at the **World Species List**[60] website.

- The **World Conservation Monitoring Centre**[61] (UNEP-WCMC) provides information services on conservation and sustainable use of the world's living resources including forests. It maintains large conservation databases including data, maps and statistics on forests, coastal ecosystems, species, protected areas, and national biodiversity.

- The IUCN **Red List of Threatened Species**[62] established by **IUCN Species Survival Commission**[63] is probably the most comprehensive resource to assess the conservation status of a given species.• **METASPEC**[64] is a meta-database that currently holds information on 136 data sources of different groups of organisms throughout Europe.

- **Invasivesspecies.gov**[65] offers numerous links and databases on invasive species (with a focus on USA but with a broader coverage)

One should note the existence of a site linking to **databases that specifically refer to forests**[66] Databases on this site are extracted from the broader World Species List website.

Botanical gardens and Arboreta throughout the world are depositories of useful information and are available at **Internet Directory for Botany: Arboreta and Botanical Gardens**[67], which offers a large list of links concerning botanical gardens and similar institutions all over the world. The Murdoch University in Western Australia offers an **overview on the rules behind nomenclature**[68]. For biodiversity search facilities see the **Swiss Biodiversity Forum site**[69] and the **Biodiversity and biological collections**[70].

In March 2002, during the second meeting of the United Nations Forum on Forests (UNFF) the Global Environment Facility (GEF) organised a forestry roundtable based on several background documents that constitute a good summary of the status and evolution of the forestry sector since the World Summit in Rio in 1992. These documents are available at the **Forestry Roundtable webpage**[71] of the GEF and deals with the following topics:

- Alien Invasive Species: A Global Threat to Forest Ecosystems
- Forest Ecosystem Services: Can they pay our way out of deforestation?
- Applying CDM to Biological Restoration Projects in Developing Nations: Key Issues for Policy Makers and Project Managers
- Forest Certification and Biodiversity: Opposites or Complements?

The discussion document based on the above background papers offers some interesting ideas and options to develop a new forestry agenda. These options, however, are not really new and it still remains to be seen why they should be implemented in the near future while they were not for the last ten years. Nevertheless this document (also available at the Forestry Roundtable web page), "To Johannesburg and Beyond: Strategic Options to Advance the Conservation of Natural Forests", tries to integrate most of the issues and develop solutions or recommendations that take into account this integrated analysis. It is compulsory reading for any biodiversity planner involved in the forestry sector.

Box 10. Information on forestry and biodiversity issues

Probably the best way to access forestry related information on the Internet without having to explore dozen of sites is to use one of the following portals:

- **FAO Forestry**[75] and **Biodiversity**[76] sites contain a lot of useful information and allow access to numerous links, publication references and online databases on forestry and biodiversity issues.
- **ELDIS** is a gateway to Information Sources on Development and the Environment. Their pages on **Forestry**[77] and on **Biodiversity and Conservation**[78] include major sources arranged into useful groups.
- The **Forest Conservation Portal**[79] is probably the largest source of news and information about forests and biodiversity conservation. It contains thousands of links, news from press agencies, NGOs, etc.
- The **Rainforest web**[80] is a similar site but devoted to rainforests.

A wealth of additional web-based information about various forestry and biodiversity issues can also be retrieved with the help of the annotated bibliography.

6. Planning processes

6.1 Guidelines

There are several detailed and rather comprehensive guidelines for designing national biodiversity action plans or national forestry programmes. One could consult:

- **For national biodiversity planning:**

The BPSP is providing several downloadable **biodiversity guidelines and models**[72]. 'A Guide For Countries Preparing National Biodiversity Strategies And Action Plans' by R. Hagen seems the most relevant in our context. It contains useful recommendations on the process. In addition, several references are made to the issue of sectoral integration but there is no real guidance on how to succeed in this task.

- **For national forestry programmes:**

The FAO is providing an on-line document on **'Formulation, Execution and Revision of National Forest Programmes: Basic principles and operational guidelines'**[73]. This is comprehensive and covers almost every point related to the development of an appropriate National Forestry Programme. The document states that: '… National Forestry Programme must be linked to broader, "higher-level" planning exercises, such as National Environmental Action Plans, National Strategies for Nature Conservation (or similar programmes and strategies)…' and proposes various operational guidelines. However, this initiative does not address integration of biodiversity into forestry planning directly and the process is very much driven by forestry sector needs, which seems contradictory to the need to make biodiversity-thinking a central part of the forest planning process for real integration to happen.

Not surprisingly, there are no biodiversity planning guidelines specifically designed to integrate biodiversity into sectoral activities such as forestry. The closest we can find is the **'Guide to Developing a Biodiversity Strategy from a Sustainable Development Perspective'**[74].

This document proposes to develop biodiversity strategies with the help of the Planning Matrix. The horizontal axis of the matrix shows the five broad phases involved in the development of a national strategy and action plan: a) bases for action; b) objectives and directions, c) actions, d) aspects related to implementation, and e) indicators. The vertical axis is built around 15 themes, which integrate all current issues and any issues that might be raised by the Conference of the Parties in the future. Forestry issues covered in 'Conservation of Natural Resources', 'Development of Wildlife Resources' and 'Development of Forest Resources'. The planning matrix attempts to ensure that important issues are not missed during the planning phase and that these issues are reflected into the final plans. It does not really answer the question of the integration of biodiversity into forestry planning but might constitute a useful tool.

6.2 Participation

In almost all the available planning literature, including all the above guidelines, 'participation' seems the key word. Still participation is multi-faceted (for a useful discussion on this topic in the context of biodiversity conservation projects see **'Principles in Practice: Staff observations of conservation projects in Africa'**[81].

The various types of participation by recognised field practitioners are:

1. Passive Participation: People participate by being told what is going to happen or what happened. This tends to be unilateral and people's responses are not taken into account. (Examples can be found in case studies regarding decisions to gazette a forest or to create a protected area).

2. Participation by Giving Information: People participate by answering questions designed by researchers and project managers. They do not have the opportunity to influence proceedings as the findings are neither shared nor checked for accuracy. This is a somewhat common drawback in some research activities (such as some ethnobotanical, anthropological or valuation studies).

3. Participation by Consultation: People participate by being consulted, and external agents listen to views. External agents define both problems and solutions and may modify these in the light of people's responses. People do not share in decision-making as their views may or may not be taken on board. This seems to be the most common type of participation in actual planning exercises (Box 11) and though far from perfect it might be the only practical one at national level, as long as local views are genuinely taken into account.

4. Participation for Material Incentives: People participate by providing resources (e.g., labour in return for food or cash). Such people are not involved in the experimentation and have no stake in maintaining activities when incentives end.

5. Functional Participation: People participate by forming groups to meet predetermined objectives related to the project. Their participation tends to occur at later stages of a project after major decisions have been made. They may become self-dependent but are initially dependent on external facilitators.

6. Interactive Participation: People participate in joint analysis, which leads to action plans and the formation new local groups or the strengthening of existing ones. Groups take control over local decisions; thus, people have a stake in maintaining structures or practices.

7. Self-mobilization: People participate by taking initiatives independent of external institutions to change systems. They may or may not challenge existing inequitable distribution of wealth and power (e.g. see the Kenya Forests Working Group in Box 8).

Obviously types 5, 6, and 7 are more conducive to future implementation and conflict reduction than the others, which does not mean that they are necessarily the most appropriate for all processes at all levels. The level, form, and timing of participation that planners must facilitate varies depending on stakeholders' capacity to participate and the issues that need to be addressed by stakeholders to manage natural resources successfully. The greater the change desired in people's use of natural resources, the greater the investment planners must make in people's participation.

Probably the most comprehensive set of information on participatory approaches is available at on the **FAO participation website**[82]. More than 60 field tools and methodologies are described on-line together with several case studies (though not necessarily on biodiversity or forestry issues) and a comprehensive list of links to other websites. Other useful methodologies can be found on CIFOR's **Adaptive Collaborative Management Webpage on methods**[83]. **The World Bank Participation Source Book**[84] and the **Institute of Development Studies**[85] webpages also offer useful on-line references.

Box 11. Participation in National Planning Processes: Examples from Country Case Studies

Zimbabwe (National Biodiversity Strategy and Action Plan):
The NBSAP preparation process placed emphasis on stakeholder consultation at various levels. Such consultations were carried out during national and provincial workshops where relevant information was obtained; and the emerging unmet needs, strategies and action plans reviewed, prioritised and improved upon based on local level realities. About 400 people including environmentalists, academics, administrators, politicians, traditional leaders, church leaders, business leaders and journalists participated in the exercise. International experts with global expertise in biodiversity planning, GEF linkages and the preparation of NBSAP were brought in to provide technical backstopping at the launch of the project and during the final national workshop. In order to raise awareness on the NBSAP preparation process, a communication strategy was designed and implemented. Among the activities carried out under the strategy were: a quarterly newsletter highlighting progress on the NBSAP preparation process; a media workshop attended by 20 representatives of the print and electronic media; and a parliamentarian's workshop attended by 25 legislatures.

Continued on Page 24

Box 11. *Continued from Page 23*

Democratic Republic of Congo (National Biodiversity Strategy):
From November 1997 to June 1998, consultations were organised at the National and provincial levels to integrate in a consensual manner the specific preoccupations of different provinces with the aim of the preservation and sustainable utilisation of biological resources. These consultations led to the adoption of the action plan on the national strategy on biodiversity but the implementation was hampered by what has been mentioned above.

South Africa (National Forestry Planning):
In 1994, the new democratic government began the process of substantial forest policy revision. This included a commitment to wider participation in policy formulation by those who would be directly affected by the implementation of such policies. The process began with stakeholder consultation, through public presentations, workshops and discussions with a broad spectrum of user groups, including those that had previously been marginalized. The result was a Green Paper (a draft policy document), which was published for comment in 1995. The discussion paper proposed that the new forest policy should incorporate not only the closed canopy forests and plantations, but also the 28 million hectares of woodlands that had previously been ignored. To do so, social forestry to encourage development through forest use and management would have to be promoted at community level, and the needs of women in forestry addressed.

6.3 Implementation

National plans of any sort have generally earned a bad name - see for example the heated debate surrounding the Tropical Forest Action Plan and its sequels the National Forestry Action Plan (Box 2). One of the main reasons for that is lack of implementation. Plans, often elaborate, are designed then left to rot on the shelf. Lack of implementation has been the plague of almost all existing global or national planning exercises.

These implementation issues get overlooked partly because institutions' formal mandates are often confused with their true operating capacities (see section on Institutions). Lack of implementation can also be linked to lack of political will and lack of proper law enforcement.

It is in fact fairly easy to draw a long list of reasons why in spite of the existence of very good plans, there is little happening on the ground. A non-exhaustive list of such reasons is given here:

At the international level

- International conventions can be contradictory, with separate agendas and no collaboration between them.
- There is a general lack of communication between government departments and people within the departments. Different departments are invited/go to different meetings, with separate agendas, and no collaboration or integration.
- There is no continuity between country representatives attending meetings
- Global 'fashions' or trends change quickly and are short-lived (project periods are short as are politician's time horizons).

At the national level

- Lack of integration between relevant departments, which results in fundamental difference in philosophy, in understanding and approach to biodiversity conservation and forestry.
- National representatives do not report back adequately to colleagues at national and district/province/local level because of:
  - Communication problems (no institutional structure for reporting, no money/ means as an excuse)
  - Real lack of capacity (phones, mail, people, skills and training, professionalism)

  - Lack of incentives (it just increases work)
  - Personal issues (unwillingness or lack of interest)
- National departments lack structure and operational strategies. This results in 'headless chicken' activity, and disorganisation.
- On the other hand, there is also the 'chicken-less head" syndrome: too much policy and politics kills the implementation.

At the local level
- Lack of capacity (people, finances, skills, training, resources, activity guidelines)
- Not a local priority, survival issues are more important
- The 'happy savage' is a myth, (almost) everyone wants development and forest areas are often linked with lack of development
- There is no long-term security for, say, loggers and villagers. As a result, discount rates are very high and short term profits will always win against future benefits
- Economically more beneficial to make gains now rather than in future

Some of the existing limiting factors will take long period to change (generally related to cultural or social issues); others are outside the reach of any biodiversity or forestry plans (e.g. demographic changes, macro-economic issues). These factors can change through awareness raising, or working at the international level on global policies. Other factors can be worked on now and changed in the short term such as capacity building, information sharing, participation, etc. Practical planning considerations should focus on the ones that can be changed in the short term but without forgetting the others.

Probably the best way to ensure a high probability of implementation is to consider implementation issues at the very beginning of the process and to ensure ownership and acceptance of the result of the planning among all stakeholders. This requires that:

- **There is a genuine and strong political commitment at the State level:**

  a) to implement strong and clear decisions

  b) to commit finances

  c) to provide incentives

  d) to ensure accountability (all planners should be held accountable for the parts they are responsible for)

- **No stakeholder group feels they are being 'abandoned' along the trail consider themselves to be castaways. Such a group is unlikely to be very active in putting the plan into action.**

Box 12. Stakeholders' involvement

Argentina:
The process of participation requires actions specially designed to inform, motivate and involve each particular sector. In this sense, the process of elaboration of the National Strategy is in itself a tool to raise public awareness. The concept base of this important effort, in time and in human resources, is that if a person understands a problem and participates in the identification of its solution, then he or she will contribute better to its implementation.

From: National Biodiversity Strategy and Action Plan[86] for Argentina

- **The development of strategies and plans is considered as a national or local decision and not something prescribed or driven from outside.**

Box 13. National appropriation of planning results

Mauritius:
The development of the National Environmental Action Plan involved no public consultation or participation, and was effectively the product of a World Bank team, working with government officials.

Solomon Islands:
The National Environmental Management Strategy report is regarded as "a truly national document developed by Solomon Islanders for the Solomon Islands". The role of the South Pacific Region Environmental Program team was to facilitate the national seminar and to assist in the preparation of the report.

*From: **Small Island States and Sustainable Development: Strategic Issues and Experience**.[87]*
IIED, Environmental Planning Issues No. 8, September 1995.

- **Implementation responsibility should be given to the most appropriate institution.**

Box 14. Implementation and institutions

Colombia:
Subcontracting the project implementation to local community groups guaranteed their participation, and provided them with the training and capacity building needed to make biodiversity conservation sustainable. Local ownership of the project was integrated into a multidisciplinary approach designed to address all the socio-economic, scientific, institutional, and political factors involved. Project coordinators helped local groups formulate project proposals, and implementation is now distributed among nearly fifty organizations.

*From: **Biodiversity Conservation in the Chocó Biogeographic region**.[88] Sustainable Development Success Stories 2000*

Biodiversity planning must consider at the onset all barriers to effective implementation and define process-based targets. The actual strategy and action plans should contain all necessary elements for achieving the agreed goals (e.g. costing, financing, responsible authority etc.). Accountability should be clearly stated and acknowledged: someone has to be responsible for the effective implementation of every action contained in the plan.

There will be no effective implementation without ways to monitor it. Evaluation processes must be clearly defined and the plans must include milestones and criteria for measuring success. Ongoing evaluation not only ensures implementation, it also provides the feedback needed to improve the plan in response to changing circumstances and new data. Implementation depends not only on the commitment of real programs and funds by governments, but also on citizen participation. Just as keen public interest is necessary at the front end of a planning exercise, citizens are also needed as "watchdogs" as the plan is implemented.

7. Conclusion: Biodiversity and forest management

We should conclude this report on a positive note. Although the integration of biodiversity into national forestry planning is far from being a reality in most cases, several real-life examples show that it is possible to integrate biodiversity issues into forest management at the local level.

The Greater Fundy Ecosystem Research Project has developed and applied on the ground a set of '**Forest Management Guidelines to Protect Native Biodiversity in the Fundy Model Forest**'[89]. Their approach (**from the executive summary**)[90] is a practical one as: 'It is impossible to plan for the conservation of biodiversity on a species-by-species basis. There are simply too many species and we have information on only a small percentage. Thus, to conserve native biodiversity, we have taken a combined top-down (coarse-filter) and bottom-up (fine-filter) approach. The coarse-filter approach allows for planning of larger-scale arrangements of communities, including their composition, size, adjacency and age-class distribution. The needs of the vast majority of native species may be accommodated by a coarse-filter approach. However, to ensure that species don't fall through or are missed by the coarse-filter approach, we have also examined the specific requirements of species or species guilds that are likely to become vulnerable given the significant stand- and landscape-level changes resulting from modern forest management and a growing human population.

These recommendations are tempered by our recognition of the economic importance of the forest industry to New Brunswick but are driven by the biological "bottom line", which is the continued viability of native populations, species and ecosystems in the Fundy Model Forest and the Greater Fundy Ecosystem.'

In Australia, the National Forest Policy of 1992 sets out broad conservation and industry goals for the management of Australia's forests agreed between Commonwealth, State and Territory Governments. To implement this national policy, governments agreed to (i) provide interim protection to forest areas which may be required for a Comprehensive, Adequate and Representative forest reserve system based on **Nationally Agreed Criteria**[91], (ii) undertake Comprehensive Regional Assessments of environment, heritage, economic and social values of forests and (iii) negotiate **Regional Forest Agreements**[82] between the Commonwealth and State Governments about the long term management and use of forests in a particular region. A set of principles for an Ecologically Sustainable Forest Management (ESFM) was nationally designed. ESFM is the management of forest on all land tenures to maintain the overall capacity of forests to provide goods, protect biodiversity, and protect the full suite of forest values at the regional level. Current State and Territory forest management practices have been independently assessed against the requirements of ESFM. Assessments have been publicised and recommendations for more appropriate practices given when necessary. These assessments and agreements have resulted in an increased and more comprehensive system of protected areas and in more biodiversity friendly forestry practices implemented on the ground.

'The new boreal forestry: adjusting timber management to accommodate biodiversity' **(by J. R. Spence)**[93] highlights the great progress made by Scandinavian countries in designing and testing forestry practices intended to ensure ecological sustainability.

Biodiversity and ecological studies are now part of the compulsory requirements to draft forest management plans in Cameroon, Gabon and other Central African countries. Several large logging companies operating in Central Africa are now showing a strong commitment to reduce the negative impact of their operations on wildlife and take the 'bushmeat' issue as a serious one. These companies have designed internal regulations more stringent than national ones to stop hunting by their employees. Collaborative agreements have been signed between logging companies and environmental NGO to help to solve this problem between the **Wildlife Conservation Society (WCS)**[94] and the Congolaise Industrielle des Bois in Congo or between the **Worldwide Fund for Nature (WWF)**[95] and BORDAMUR in Gabon.

The new demand for sound forestry is also giving rise to a new generation of forest companies, such as **Global Forest Products**[96] (GFP) in South Africa and Renewable Resources, LLC, an affiliate of **Grantham, Mayo, Van Otterloo & Co., Inc.**[97] (GMO) in the Brazilian Amazon, that are based on business models that seek to marry profitability with cutting-edge social and environmental management.

Integration of biodiversity issues for better forest management is possible - it is essentially a matter of willingness and knowledge. We hope to have provided some basis for the latter in this report and we hope also that willingness will emerge strongly as the civil society as a whole realises that time is counted for forest biological diversity and that we must act now.

Endnotes

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